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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,217	09/27/2001	Michael C. Brauer	091395-9246 (4896-TC-AU)	5881

23585 7590 01/31/2003

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EXAMINER	
VAN PELT, BRADLEY J	
ART UNIT	PAPER NUMBER
3682	

DATE MAILED: 01/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/966,217

Applicant(s)

BRAUER ET AL.

Examiner

Bradley J Van Pelt

Art Unit

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 7, 8, and 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7, 8 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 September 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Election/Restrictions

1. Applicant's election of Species C, Figure 6 in Paper No. 8 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the second cam plate rotatable with respect to the first cam plate must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-4, 7, 8 and 10 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is not shown how the second cam plate is rotatable with respect to the first cam plate.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 4, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Hoblingre et al. (USPN 5,088,767).

Hoblingre et al. disclose a ball ramp actuator for use as a locking mechanism, the actuator comprising: a first cam plate (42) having at least one groove (46) providing a non-circumferential ball ramp; a second cam plate (24) rotatable with respect to the first cam plate (column 4, lines 12-14), and having at least one groove (44) providing a non-circumferential ball ramp, the ball ramp of the second cam plate intersecting with the ball ramp of the first cam plate when viewed axially; a ball positioned between the first and the second cam plates, in the grooves of the first and second cam plates; and biasing means (48) for biasing the ball radially to ensure that the ball follows the non-circumferential ball ramps of both cam plates in response to relative rotation of the two cam plates; wherein the biasing means comprises a ball retainer with a pocket (50) within which the ball is located; wherein the number of balls is three (see fig. 5).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoblingre et al, as applied to claim 1.

Hoblingre et al. disclose all of the instantly claimed invention, except, the grooves become shallower as they extend radially outward such that radially outward movement of the ball spreads the cam plates apart.

It would have been obvious to one having ordinary skill in the art at the time of the invention was made to make the grooves become shallower as they extend radially outward such that radially outward movement of the ball spreads the cam plates apart, since it has been held that a mere reversal of the essential working parts of a device involves only routing skill in the art.

9. Claims 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoblingre et al (USPN 5,088,767), as applied to claim 1, in view of Kumpar (USPN 4,357,810).

Hoblingre et al. disclose all of the instantly claimed invention except the biasing means comprises a ball retainer in contact with the ball and having resiliently deformable portions that serve as integral springs; wherein the biasing means comprises a ball retainer made of an elastically deformable polymer.

Kumpar discloses a ball retainer (20) in contact with the ball and having resiliently deformable portions that serve as integral springs; wherein the biasing means comprises a ball retainer made of an elastically deformable polymer (column 2, lines 57- 68).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ball retaining apparatus of Hoblingre et al. with a flexible polymer for the purpose of easing the assembly of the ball ramp actuator.

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10. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoblingre et al., as applied to claim 1, in view of Davis et al. (USPN 5,713,445).

Hoblingre et al. disclose all of the instantly claimed invention, except, the grooves include at least one spherical recess to provide a detent for maintaining the ball in a locked or unlocked position.

Davis et al. show grooves (37a) in a ball ramp device that include at least one spherical recess (35c) to provide a detent for maintaining the ball in a locked or unlocked position.


It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ball ramp of Hoblingre et al. to include detents for the purpose of engaging device.


Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Griffen et al. (USPN 4,938,613), Botterill (USPN 5,078,249), Kato et al. (USPN 6,083,137), Walton et al. (USPN 6,182,808), Walton et al. (USPN 6,237,735). Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley J Van Pelt whose telephone number is (703)305-8176. The examiner can normally be reached on M-Th 7:00-4:30, 2nd F 7:00-3:30.

12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Bucci can be reached on (703)308-3668. The fax phone number for the organization where this application or proceeding is assigned is (703)305-3597.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-2168.

BJVP 
January 24, 2003


DAVID A. BUCCI
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